This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claims 1-27 (cancelled).

Claim 28 (previously amended): A method for treating epithelially derived benign, semi-malignant or malignant neoplasms, the method comprising administering topically to a mammal in need thereof a therapeutically effective amount of an active enamel substance.

Claim 29 (previously amended): A method according to claim 28, wherein the active enamel substance is applied in an amount of total protein per cm^2 area of affected tissue corresponding from about 0.01 mg/cm^2 to about 20 mg/cm^2.

Claim 30 (previously presented): A method of claim 28 wherein the active enamel substance is enamel matrix, enamel matrix derivatives and/or enamel matrix proteins.

Claim 31 (previously presented): A method of claim 28 wherein the active enamel substance is selected from the group consisting of enamelins, amelogenins, non-amelogenins, proline-rich non-amelogenins, amelins, tuftelins and derivatives thereof and mixtures thereof.

Claim 32 (previously presented): A method according to claim 28, wherein the active enamel substance is applied in an amount of total protein per cm^2 area of affected tissue corresponding from about 0.1 mg/cm^2 to about 15 mg/cm^2.

Claim 33 (previously presented): A method of claim 28 wherein the active enamel substance has a molecular weight not exceeding about 120 kDa as determined by SDS Page electrophoresis.

Claim 34 (previously presented): A method of claim 28 wherein the active enamel substance has a molecular weight not exceeding about 100 kDa as determined by SDS Page electrophoresis.

Claim 35 (previously presented): A method of claim 28 wherein the active enamel substance has a molecular weight not exceeding about 90 kDa as determined by SDS Page electrophoresis.

Claim 36 (previously presented): A method of claim 28 wherein the active enamel substance has a molecular weight not exceeding about 80 kDa as determined by SDS Page electrophoresis.

Claim 37 (previously presented): A method of claim 28 wherein the active enamel substance has a molecular weight not exceeding about 70 kDa as determined by SDS Page electrophoresis.

Claim 38 (previously presented): A method of claim 28 wherein the active enamel substance has a molecular weight not exceeding about 60 kDa as determined by SDS Page electrophoresis.

Claim 39 (previously presented): A method of claim 28 wherein the active enamel substance has a molecular weight up to about 40,000 as determined by SDS Page electrophoresis.

Claim 40 (previously presented): A method of claim 28 wherein the active enamel substance has a molecular weight between about 5,000 and about 25,000 as determined by SDS Page electrophoresis.

Claim 41 (previously presented): A method of claim 28 wherein at least a part of the active enamel substance is in the form of aggregates or after application in vivo is capable of forming aggregates.

Claim 42 (previously presented): A method of claim 41 wherein the aggregates have a particle size of from about 20 nm to 1 μm.

Claim 43 (previously presented): A method of claim 28 wherein a pharmaceutical composition comprising the active enamel substance is administered to the mammal.

Claim 44 (previously presented): A method of claim 43 wherein the pharmaceutical composition comprises a pharmaceutically acceptable excipient.

Claim 45 (previously presented): A method of claim 44 wherein the pharmaceutically acceptable excipient is propylene glycol alginate.

Claim 46 (previously presented): A method of claim 44 wherein the pharmaceutically acceptable excipient is hyaluronic acid or a salt or derivative thereof.

Claim 47 (previously presented): A method of claim 28 wherein the active enamel substance comprises amelogenins and has a molecular weight of about 60 kDa to about 120 kDa as determined by SDS Page electrophoresis.

Claim 48 (previously presented): A method for treating ectodermally derived benign, semi-malignant or malignant neoplasms, the method comprising administering topically to a mammal in need thereof a therapeutically effective amount of an active enamel substance.

Claim 49 (previously presented): A method of claim 48 wherein the ectodermally derived neoplasms are epithelially derived neoplasms.

Claim 50 (currently amended): A method of claim 48 or 49 wherein the active enamel substance comprises amelogenins and has a molecular weight of about 60 kDa to about 120 kDa as determined by SDS Page electrophoresis.

Claim 51 (previously presented): A method of claim 48 wherein the ectodermally derived benign, semi-malignant or malignant neoplasms originate in a bodily tissue selected from the group consisting of glandular, bone, skin, ovarian and muscle tissue.

Claim 52 (previously presented): A method for treating conditions in a mammal characterized by the occurrence of ectodermally derived neoplastic cells, the method comprising

administering topically to a mammal in need thereof a therapeutically effective amount of an active enamel substance.

Claim 53 (previously presented): A method of claim 52 wherein the active enamel substance comprises amelogenins and has a molecular weight of about 60 kDa to about 120 kDa as determined by SDS Page electrophoresis.

Claim 54 (previously presented): A method for treating ectodermally derived cancers and tumors, the method comprising administering topically to a mammal in need thereof a therapeutically effective amount of an active enamel substance.

Claim 55 (previously presented): A method of claim 54 wherein the active enamel substance comprises amelogenins and has a molecular weight of about 60 kDa to about 120 kDa as determined by SDS Page electrophoresis.

Claim 56 (previously presented): A method for treating epidermally derived cancers and tumors, the method comprising administering topically to a mammal in need thereof a therapeutically effective amount of an active enamel substance.

Claim 57 (previously presented): A method of claim 56 wherein the active enamel substance comprises amelogenins and has a molecular weight of about 60 kDa to about 120 kDa as determined by SDS Page electrophoresis.